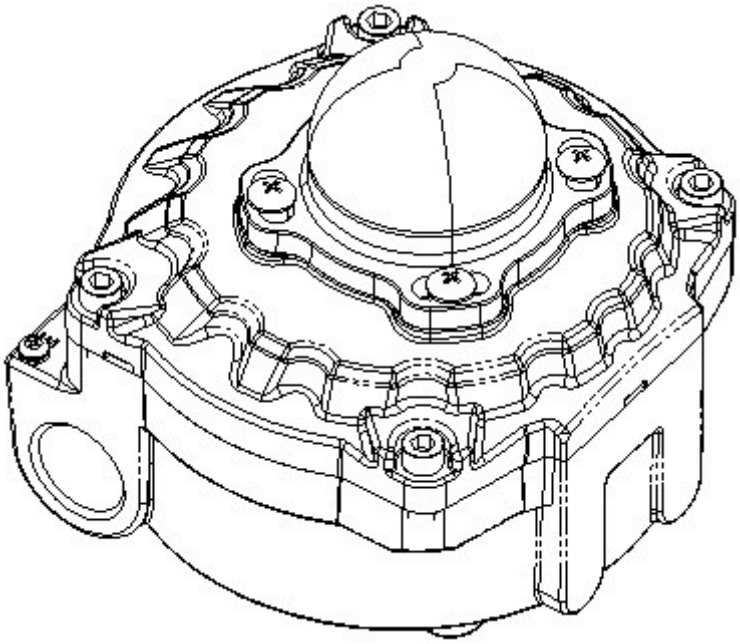
LIMIT SWITCH BOX

YT-870 SERIES

USER'S MANUAL



YTC V.1.00

Introduction

Thank you for choosing YTC product. Each product is fully inspected after the production to offer you the highest quality. In order to fully utilize the product, we strongly recommend users to read the manual carefully and fully understood.

- The manual should be provided to the end-user.
- The manual can be altered or revised without any prior notice. Any changes in product's specification, structure, and/or any components may not result immediate revised version of the manual.
- The manual should not be duplicated or reproduced for any purpose without any approval from Young Tech Co., Ltd, South Korea.

Manufacturer Warranty

- For the safety, it is imperative to follow instructions in the manual. It is not manufacturer's liability for any damages which caused by users' negligence.
- It is not manufacturer's liability for any damages or accidents which resulted by any alteration or modification of the product and parts. If alteration or modification is necessary, please contact the manufacturer directly.
- Manufacturer warrants the product from the date of original retail purchase of the product for one (1) year, except as otherwise stated.
- Manufacturer warranty will not cover the products that the product have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; damages that occurs in shipment, due to act of God, failure due to power surge, and cosmetic damage. Improper or incorrectly performed maintenance or report voids this Limited Warranty.
- For detailed warranty information, please contact the corresponding local Young Tech Co., Ltd office or main office in South Korea.

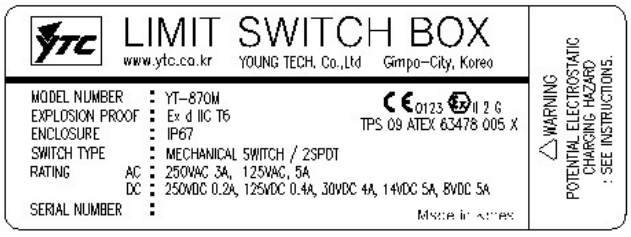
Safety Precautions

- YT-870 is designed for explosion proof area. The user must follow other explosion proof procedures and safety precautions.
- For unused power connectors, please make sure to use blind plugs which is explosion proof certified.
- If cover must be opened for any case, the power must be turned off and wait for at least 30 seconds.
- When connecting power, please make sure to use flameproof proven sealing fitting and/or cable glands. <Power cable must be at least 1 ㎟ or 18AWG.

Product Description

YT-870 series monitors and transmits the valve position at the specific point.

Label Description


LIMIT SWITCH BOX
www.ytc.co.kr
YOUNG TECH. Co.,Ltd
Gimpo-City, Korea
MODEL NUMBER : YT-870M
EXPLOSION PROOF : Ex d IIC T6
ENCLOSURE : IP67
SWITCH TYPE : MECHANICAL SWITCH / 2SPDT
RATING AC : 250VAC 3A, 125VAC, 5A
DC : 250VDC 0.2A, 125VDC 0.4A, 30VDC 4A, 14VDC 5A, 8VDC 5A
SERIAL NUMBER :
0123 II 2 G
TPS 09 ATEX 63478 005 X
WARNING
POTENTIAL ELECTROSTATIC CHARGING HAZARD
: SEE INSTRUCTIONS.

Model Number:	Indicates model number
Explosion Proof:	Indicates explosion proof grade
Enclosure:	Indicates protection grade
Switch Type:	Indicates switch type and number of the switch
Rating:	Indicates allowable voltage
Serial Number:	Indicates unique serial number

Suffix Symbols

YT-870 [1] [2] [3]

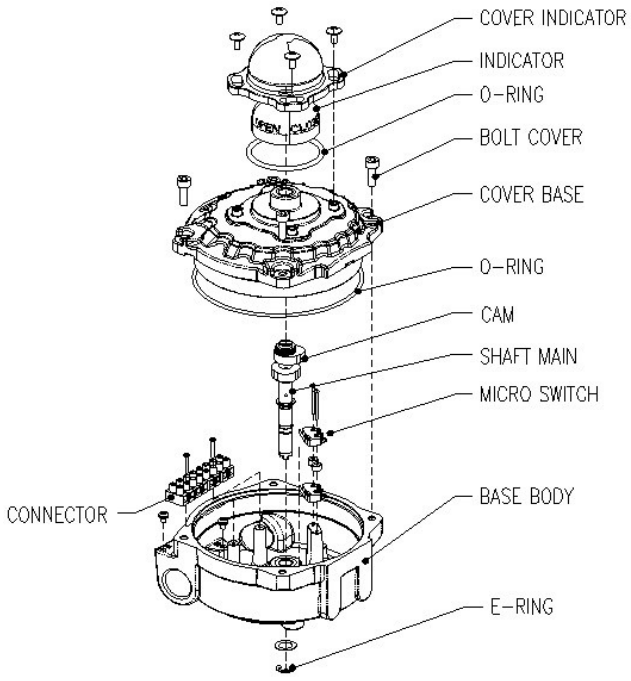
[1] Switching Type	M : Mechanical Type (2x SPDT) P : Proximity Sensor Type D : Mechanical Type (2x DPDT)
[2] Connection Type	1 : NPT 3/4 2 : PF 3/4 3 : M20 4 : NPT 1/2 5 : PT 1/2
[3] Bracket Type	1 : ST-1 (80X30, H20) 2 : ST-2 (80X30, H30) 3 : ST-3 (130X30, H30) 4 : ST-4 (130X30, H50)

Specification

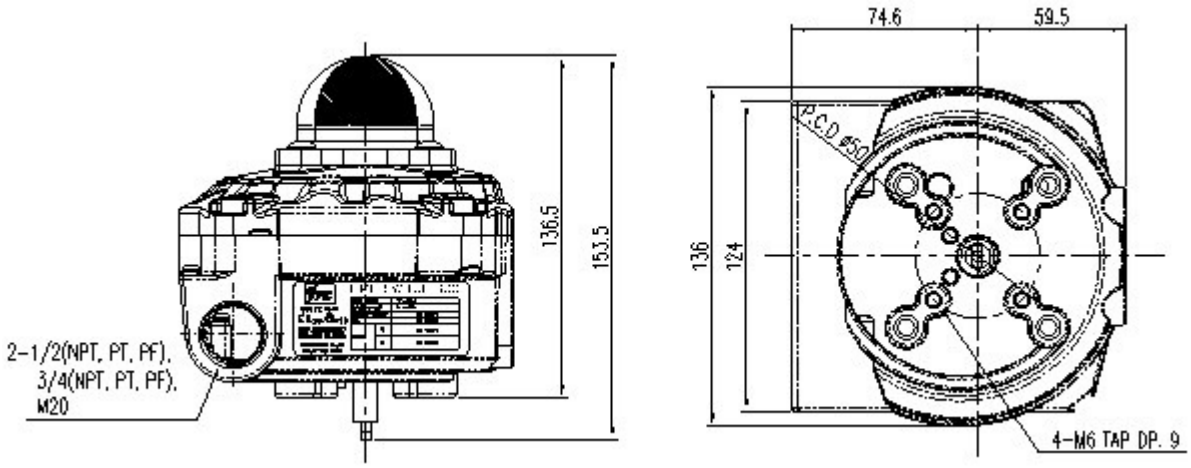
Model		YT-870M		YT-870P		YT-870D
Switch Type		Mechanical Switch (2*SPDT)		Inductive Proximity Sensor		Mechanical Switch (2*DPDT)
		SS5GL (Omron)	SS10GL (Omron)	PS17-5DNU (Autonics)	NJ2-V3-N (P&F)	DZ-10G-1B (Omron)
Switch Rating	AC	250V 3A 125V 5A	250V 10.1A 125V 10.1A	-	-	125 or 250VAC 10A 480VAC 2A
	DC	250V 0.2A 125V 0.4A, 30V 4A	250V 0.2A 125V 0.4A, 30V 4A	12~24 VDC (Allowable Voltage : 10~30VDC)	0~25VDC	1/8HP 125VDC, 1/8HP 125VDC, 0.5A 125VDC, 0.5A 125VDC,
Terminal		8 Point		8 Point		12 Point
IP Grade		IP67				
Explosion Proof		Ex d IIC T6 (ATEX)				
Ambient Temp.		-20°C ~ 60°C				
Conduit Entry		2 - 1/2(NPT, PT, PF), 3/4(NPT, PT, PF), M20				
Mounting Bracket		NAMUR VDI / VDE 3845, ISO 5211				
Material		Aluminum Diecasting				
Weight		1.5kg (3.3lb)				

* Tested under ambient temperature of 20℃, absolute pressure of 760mmHg, and humidity of 65%. Please contact YTC for the more detailed specification.

Parts and assembly



Dimensions



Installation

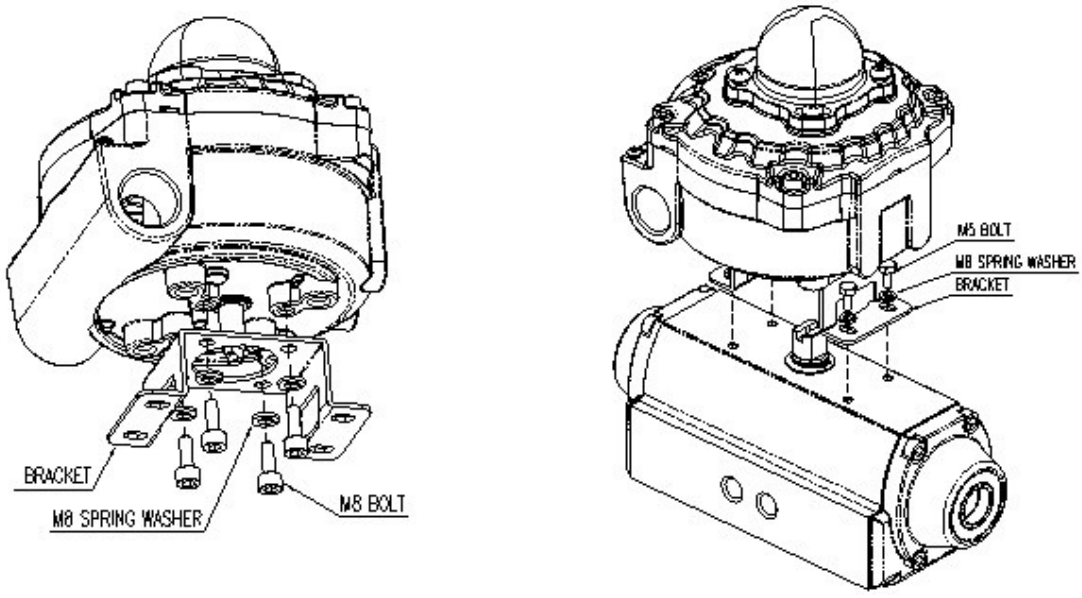
Safety Warning

- All input and supply pressure to valve, actuator, and other related devices must be turned off when installing.
- YT-870 is designed for explosion proof area. The user must follow other explosion proof procedures and safety precautions.
- Make sure there is no explosive gas or material present before the installation.

YT-870 Installation

① Assemble limit switch body with the bracket provided in the box.

② Align the main shaft of the limit switch box and the stem of the actuator. After the alignment, tighten the bracket onto the actuator.

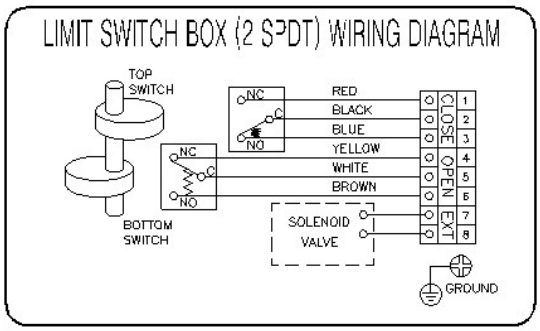


Connection – Power

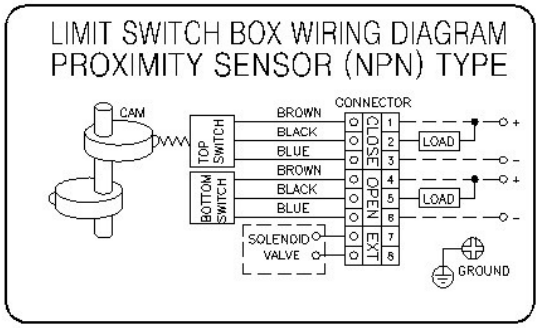
Safety Warning

- Make sure there is no explosive gas or material present before the installation.
- If cover must be opened for any case, the power must be turned off and wait for at least 30 seconds.
- For unused power connectors, please make sure to use blind plugs which is explosion proof certified.
- When connecting power, please make sure to use flameproof proven sealing fitting and/or cable glands. <Power cable must be at least 1mm^2 or 18 AWG>
- Make sure the polarities are correct.
- Don't use too much force when pull the cable, and make sure the cable does not peel off.

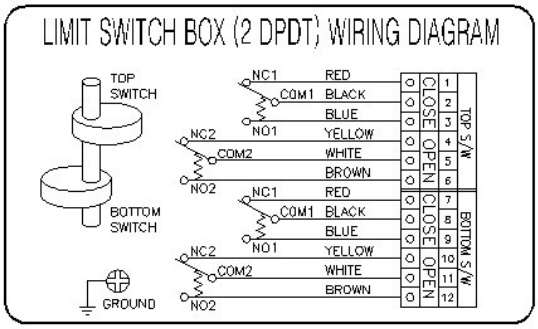
Mechanical Type <2 SPDT>



Proximity Type <NPN Sensor>

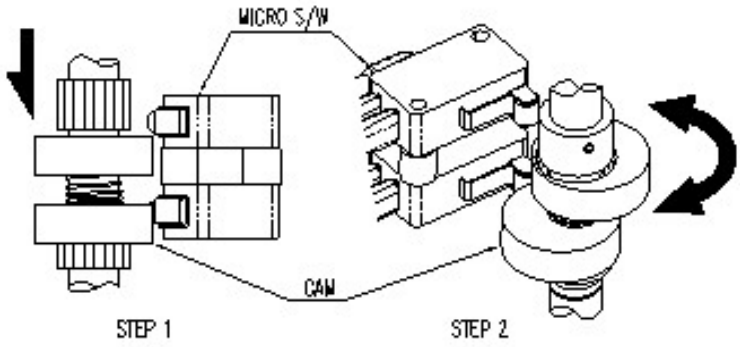


Mechanical Type <2 DPDT>



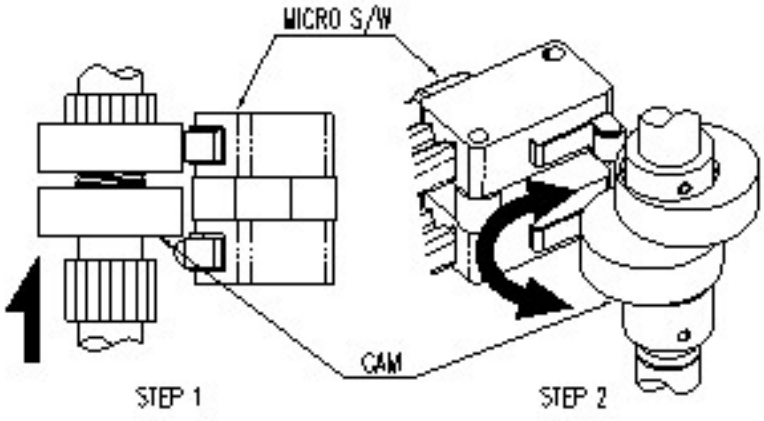
Adjustment – Upper Switch

① Push down upper switch and turn right or left to preferred position.

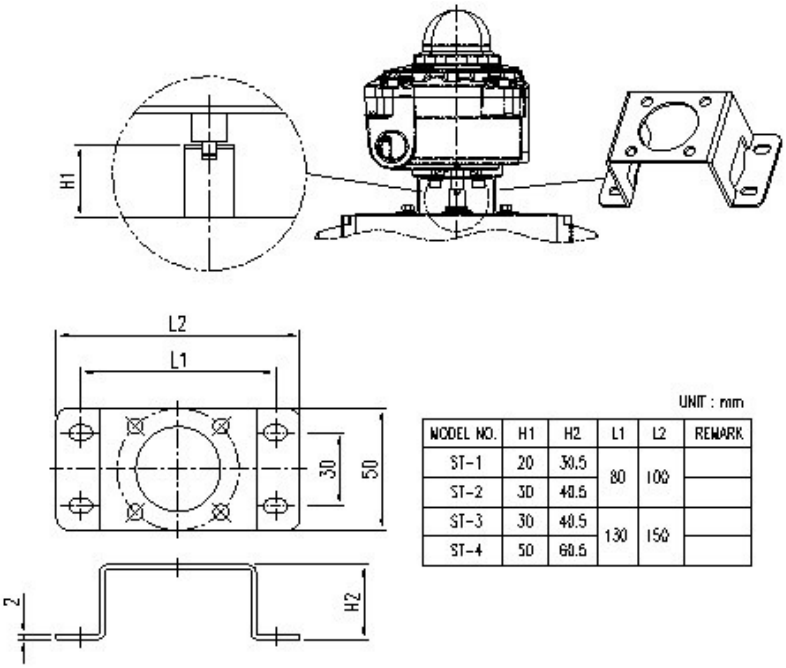


Adjustment – Lower Switch

① Pull up lower switch and turn right or left to preferred position.



Bracket



UNIT : mm

MODEL NO.	H1	H2	L1	L2	REMARK
ST-1	20	30.5	80	100	
ST-2	30	40.5			
ST-3	30	40.5	130	150	
ST-4	50	60.5			

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J+J Deutschland GmbH

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User Manual and other information on the documents are subjected to change without any notice. Please visit website for most updated information. Printed Date: June, 2007